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United States Patent [19]

Ziemek et al.

[11] **Patent Number:** 5,143,897[45] **Date of Patent:** Sep. 1, 1992[54] **FLEXIBLE, HIGH TEMPERATURE
SUPERCONDUCTIVE CABLES**[75] **Inventors:** Gerhard B. Ziemek, Langenhagen,
Fed. Rep. of Germany; Lzyaslav G.
Peshkov, Moskau, U.S.S.R.; Grigorij
Svalov, Moskau, U.S.S.R.; Victor E.
Sytnikov, Moskau, U.S.S.R.; Valerij
A. Mitrochin, Moskau, U.S.S.R.[73] **Assignee:** Kabelmetal Electro GmbH, Hanover,
Fed. Rep. of Germany[21] **Appl. No.:** 653,894[22] **Filed:** Feb. 12, 1991[30] **Foreign Application Priority Data**

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[51] **Int. Cl.⁵** H01L 38/24[52] **U.S. Cl.** 505/1; 29/599;
228/151; 228/155; 228/173.4; 228/173.5[58] **Field of Search** 29/599; 505/1, 917,
505/921, 928, 929, 930; 228/147, 151, 155,
173.5, 173.4[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Joseph M. Gorski*Attorney, Agent, or Firm*—James C. Jangarathis[57] **ABSTRACT**

Method of manufacturing a flexible, high temperature superconductive cable by longitudinally imbedding a ceramic oxide material in a band source material, and then compressing same to form an elongated flat band, which in turn is deformed into a hollow tubular member whose longitudinal edges are welded before such member is corrugated. Further, there is disclosed a flexible, high temperature superconductive cable including a corrugated metallic wall having imbedded therein at least one superconductor of ceramic oxide material extending continuously therethrough.

6 Claims, 2 Drawing Sheets